

Claims

[c1]

An addressable display useable as a label, comprising:

a bistable display device usable as a label;
an energy source that generates an operating signal; and
a microcontroller that receives the operating signal generated by the energy source and provides a control signal to the bistable display device so that an image is generated on the label.

[c2]

The addressable display according to claim 1, wherein the bistable display comprises at least one of: a transducer, and an electric paper.

[c3]

The addressable display according to claim 2, wherein the bistable display device comprises a gyricon display.

[c4]

The addressable display according to claim 1, wherein the power source is at least one of: a thin film battery, and an ambient energy source.

[c5]

The addressable display according to claim 4, wherein the ambient energy source converter is a photoelectric cell.

[c6]

The addressable display according to claim 1, wherein the bistable display detects at least one of: a write-to function, and a read-from function.

[c7]

The addressable display according to claim 1, wherein the bistable display retrieves at least one of: format and access authorization, and serialization information.

[c8]

The addressable display according to claim 1, wherein the bistable display evaluates at least one of: content transfer, expiration date, capacity remaining in the media, errors in the media, and location of the errors in the media.

[c9]

A user configurable bistable display useable as a label, comprising:

a bistable display device usable as a label;
a power source that generates an operating signal;
a controller that receives the operating signal and generates a control signal; and

user configurable pattern electrodes affixed to a portion of the bistable display, the pattern electrodes receiving the control signal from the controller and applying an electric field across the user selected portions of the display device.

- [c10] A method of displaying images usable as a label, comprising:
displaying a first image on a bistable display device usable as a label, the first image including a first region displayed with a first optical characteristic which is different than a second region displayed with a second optical characteristic;
receiving the display control signal produced by a circuit, the circuit be powered by a power source; and
responsively to the control signal, displaying a second image on the bistable display device, the second image including the first and second regions, the first region being displayed in a third optical characteristic other than the first optical characteristic and the second region being displayed in a fourth optical characteristic other than the second optical characteristic.
- [c11] The addressable display according to claim 10, wherein the bistable display comprises at least one of: a transducer, and an electric paper.
- [c12] The addressable display according to claim 11, wherein the bistable display device comprises a gyricon display.
- [c13] The addressable display according to claim 10, wherein the power source is at least one of: a thin film battery, and an ambient energy source.
- [c14] The addressable display according to claim 13, wherein the ambient energy source converter is a photoelectric cell.
- [c15] The addressable display according to claim 10, wherein the bistable display detects at least one of: a write-to function, and a read-from function.
- [c16] The addressable display according to claim 10, wherein the bistable display retrieves at least one of: format and access authorization, and serialization

information.

[c17] The addressable display according to claim 10, wherein the bistable display evaluates at least one of: content transfer, expiration date, capacity remaining in the media, errors in the media, and location of the errors in the media.

[c18] A method of creating a display usable as a label, the method being suitable for execution proximate to a location where the display is to be deployed, the method comprising:

configuring a set of electrodes in a pattern corresponding to an image to be displayed as a label;

affixing the set of electrodes to a bistable, electrically activatable display device; and

operatively coupling the display device with the electrodes thus affixed to a power source and a controller, the controller being capable of generating a control signal for the display device using the power source.

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